

VAPOR RECOVERY ISSUES MATRIX

September xx, 1998

Revised:

ISSUE	PRIORITY	TIMING	DESIRED OUTCOME	PREREQUISITE	WHO
1. Problems with Wayne "DL" dispensers & OPW nozzles.			Re-establish reliable operation.	See 24.	ARB & mfrs.
2. Investigate problems with crimping of inner hoses.			Ensure performance of VR systems. Product improvement.		ARB & mfrs.
3. Re-evaluate Stage I equipment: <ul style="list-style-type: none"> • Drain valves. • Drop-tubes. • P/V Valves. • Connectors. 			Minimize emissions by ensuring equipment reliability. Product improvement.		ARB, districts & mfrs.
4. Re-evaluate slate of periodic tests (including the newly-identified 27-inch WC vacuum test for dispensers).			Re-evaluate test procedures to settle all debate (particularly for pressure-decay testing).		ARB, districts & RGOs.
5. Establish pressure drop "budgets" for vacuum-assist systems.			Limit pressure drop of hanging hardware to ensure performance.		ARB & mfrs.
6. Complete study of Stage II/ORVR emissions compatibility.			Real-world data regarding extent of emissions problem, if any.		ARB
7. Address problems with "Curly-Q" hoses.			Provide remedy for problems.		ARB & mfrs.
8. Mfr. recommendations for preventative maintenance.			Have written PM recommendations available.	See 19.	Mfrs.
9. Evaluate ORVR designs (required to meet proposed emission specs.) for Stage II compatibility.			Ensure effective (and <u>cost-effective</u>) control of emissions.		ARB & autos.

10. Test procedures for Above-ground Storage Tanks (ASTs).			Develop appropriate test procedures.		ARB & districts.
11. Adopt ORVR-compatibility test procedure.			Test needed in order to certify new Stage II systems.		ARB.
12. Evaluate program to track equipment reliability.			Provide feed-back to ARB for use in certification program.		WSPA
13. Develop additional diagnostic tests, and conduct "beta-testing". • 27-inch WC vacuum test. • BA-AQMD "Bag Test".			Mfr. prototype testers and conduct "beta-testing" in select districts.		ARB, OPW & air districts.
14. Establish appropriate actions to be taken after a "drive-off" occurs.			Provide for the establishment of appropriate requirements, as needed.		ARB, districts, mfrs. & RGOs.
15. Training and certification: • Equipment installers. • Maintenance personnel. • Testing personnel			Establish training programs and maintain personnel records.		ARB, air districts, mfrs. & contractors.
16. UST manifolding and venting: • Configuration requirements. • Appropriate number of P/V valves to be installed.			Appropriate design specs will minimize emissions potential.		ARB, districts & mfrs.
17. Develop measures to ensure Stage II / ORVR emissions-compatibility.			Ensure effective (and, <u>cost-effective</u>) control of emissions. Evaluate all alternatives.	6,9 & 11	ARB, autos & mfrs.
18. Develop "industry standards" for vapor recovery equipment.			Industry stds. for materials, performance, etc.		API
19. Consider enhancements to certification process: • Expiration dates for certifications. • Preparation of "Summary of Certification Process" documents.			Desirability to be determined.	See 8.	ARB.

<ul style="list-style-type: none"> • "Ownership" of system certifications. • Extended warranty requirements. • Failure mode testing as part of certification process. 					
20. Investigate establishment of uniform inspection requirements for new sites prior to back-filling.			Desirability to be determined.		ARB, districts & RGOs.
21. In-Station Diagnostics.			Diagnostics for new systems.	19	ARB, mfrs. & RGOs.
22. Project Stage II/ORVR "cross-over" point for target elimination of Stage II systems.			Information needed for future work regarding cost/effectiveness.		ARB.
23. Gasoline pump interlocks: <ul style="list-style-type: none"> • Need for potential retrofit. • Testing requirements. 			Effectively prevent the dispensing of gasoline if a dispenser vacuum pump, or vent-line processor has failed.		ARB.
24. Evaluate need for additional design changes for OPW 11VA1.			Maximize long-term performance in the field.	See 1.	ARB & air districts.
25. Evaluate cost/benefit of a potential requirement for factory-testing of nozzles.			Maximize long-term performance in the field.		ARB & mfrs.
26. Revise list of major defects in Title 17.			Update needed. Desirable to clarify discrepancies warranting NOVs/NTCs.		ARB & air districts.

Note: Issue numbering is for listing purposes only and does not reflect any consideration of priority.